

Online text analysis tools for test development and validation: Text Inspector

*I'm preparing a
TEST – which text
is best?*

*How can I
measure the lexis
in my students'
essays?*

*Is this text
too hard for
my class?*

Stephen Bax

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The Open
University

Background: teaching since 1981

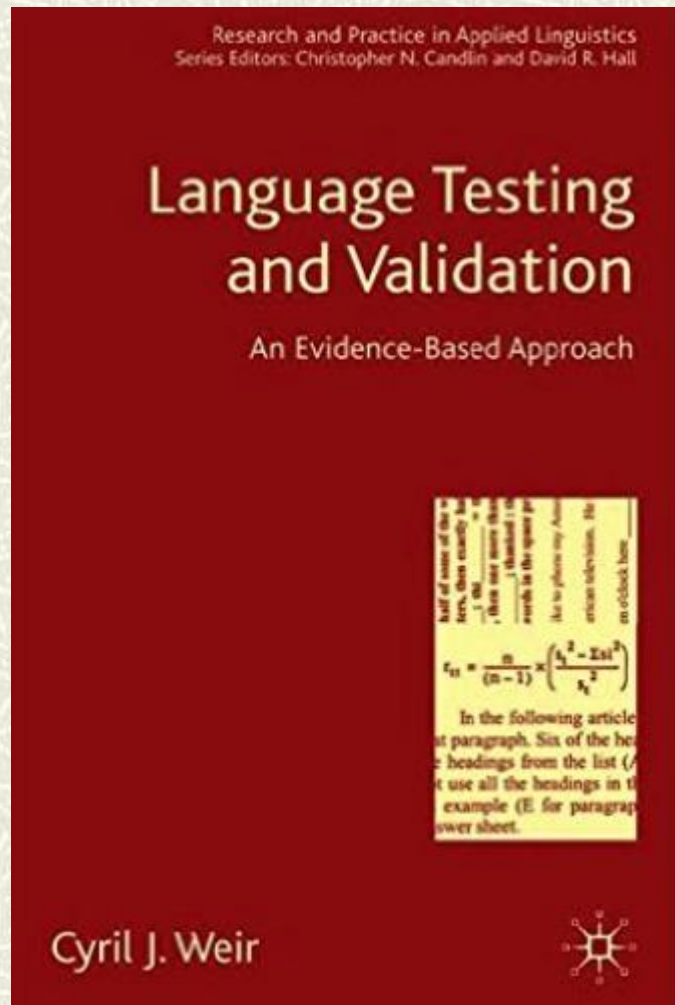


My research interests

- # Discourse
- # Eye tracking for researching reading
- # CALL – normalisation
- # Computers in text analysis
- # At the Open University since 2015

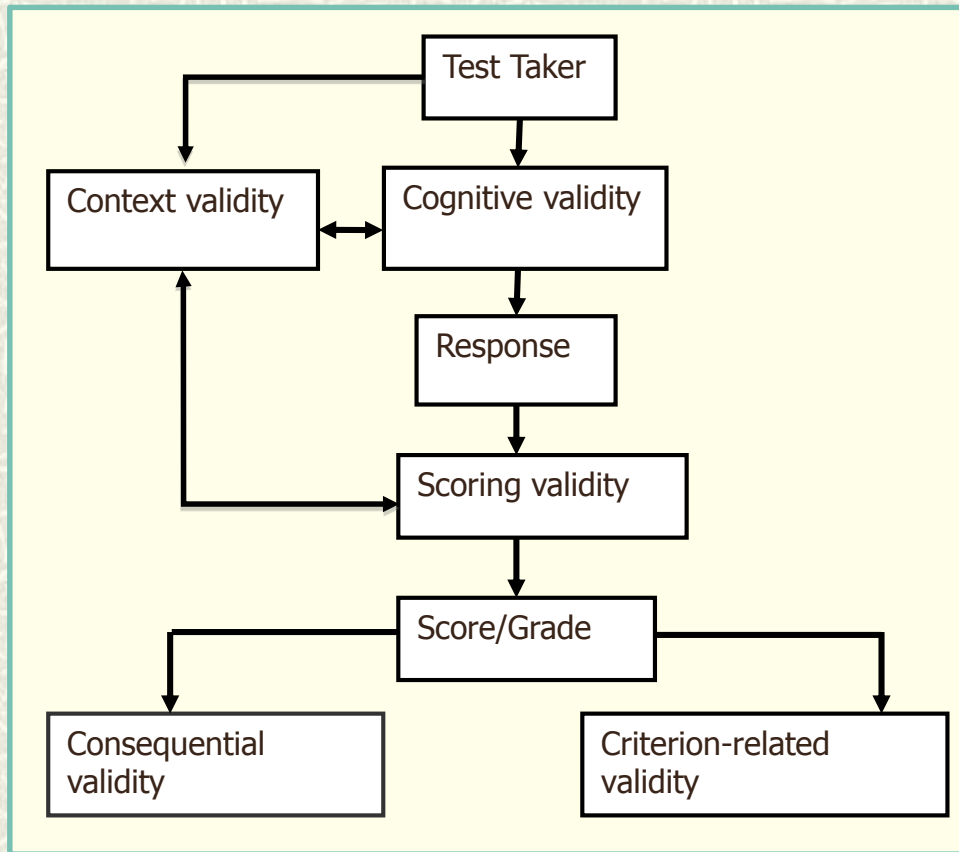


Background



Weir, C J (2005)
*Language Testing and
Validation: An
Evidence-Based
Approach*, Basingstoke:
Palgrave Macmillan.

Sources of validity evidence



- test-taker characteristics
- cognitive focused
- context focused
- scoring focused
- criterion focused (external)
- consequentially focused

Context validity in reading

Context validity relates to the appropriateness of:

- A. the *linguistic and content demands of the text to be processed* (i.e. read and comprehended), and
- B. *the features of the task setting* that impact on task completion

Taylor, L. and C. Weir CRELLA, University of Bedfordshire

Paper given at the 9th EALTA Conference, Innsbruck, Austria –31 May to 3 June 2012

ALTE Helsinki

- Lextutor.ca VocabProfile (and French tools)
- Cohmetrix (if possible)
- **Text Inspector**
(English, with plans for other languages)

The professional web tool for analysing texts

Text Inspector analyses the difficulty level of texts in English, giving you an instant score and detailed feedback.

Try it now!

Find out more about Text Inspector >

Try it out right now

Analyse up to 500 words free.

Try the tool out with this paragraph of text here, by pressing Analyse below. Or you can replace this whole text with some text of your choosing. Simply paste any text into this box, or else type it in yourself!

Text Inspector gives different scores for Writing texts (student writing) and Reading and Listening texts (e.g. texts designed for classroom reading or listening). The default is Writing, so if your text is for Reading or Listening, please go to Advanced Options to change the mode and get accurate calculations.

Look at our Subscriptions section for special offers and discounts.

ANALYSE

Need to analyse longer documents or upload a file?

ADVANCED OPTIONS

EXPLORE
SUBSCRIPTION PLANS

Classroom research



Elaine, teacher and MA student in Spain: "What I did was analyse three main textbooks used in secondary schools in the region where I live to see how much less regular they shared. Thanks to Text Inspector, I



textinspector.com



Workshop materials

- Samples of student writing
- The texts were assessed between A2-C2
- <http://textinspector.wikispaces.com>

Websites for the workshop

1. <http://textinspector.wikispaces.com/home>
2. www.textinspector.com
3. www.textinspector.co.uk:4000/fr/

Larger aim: Level Lexical Profile

The profile of a particular *Level* of language users in terms of their

*lexical knowledge base (lexical content),
lexical size and their
lexical deployment*

at a particular stage of developing proficiency.

Bax, S. (in preparation) '*Criterion features in L2 Lexis: Towards a Level Lexical Profile of Learner English*'

Key criteria

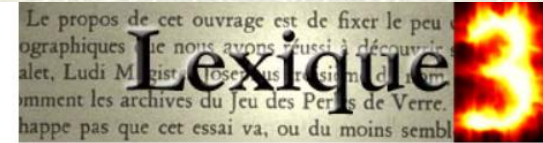
A Lexical Profile should be

- *empirically-derived*
- *benchmarked* to an established framework (e.g. the CEFR)
- *comprehensive*.

Bax, S. (in preparation) '*Criterial features in L2 Lexis: Towards a Level Lexical Profile of Learner English*'

Level Lexical Profiles Project

- Open University datasets
- French, Spanish, German, Welsh
- Research funding
- Using Text Inspector and other tools



Un site réalisé par [Boris New](#) & [Christophe Pallier](#) et hébergé par le [RISC](#)

Menu principal

[Accueil](#)[Interroger Open Lexique](#)[Télécharger](#)[Documentation](#)[Autour de Lexique](#)[Autres outils](#)

Select Language ▼

Powered by [Google Translate](#)

Présentation de Lexique

Lexique 3 est une base de données qui fournit pour 135 000 mots du français: les représentations orthographiques et phonémiques, la syllabation, la catégorie lemmes associés, etc.

Si vous êtes nouveau venu, commencez par télécharger et lire le [manuel de Lexique](#).

Lexique permet d'obtenir des informations précises sur un mot ou, par exemple, de calculer [diverses statistiques du français](#).

Ces informations sont stockées dans des tables que vous pouvez [télécharger](#) sur votre ordinateur ou interroger [en ligne](#).

Lexique est une base de données [libre](#) à laquelle chacun est [encouragé à participer](#).

Lexique fournit

- 135 000 mots
- 55 000 lemmes (Lexique 2 + Lexique 3)

Validation: Discourse and text analysis

textinspector.com

Try it out right now

Analyse up to **500 words** free.

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SUBSCRIPTION PLANS

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Lexical Profile - Writing ?

This is the overall **Lexical Profile** for your Writing text. Your score is given as a percentage, with 100% indicating a high level native speaker Academic text.

For the meaning of A1-C2 please see [here](#).

PERCENTAGE



NUMBER OF
METRICS USED

28

CEFR LEVEL

C1+

Scorecard

These are the metrics used to calculate the **Lexical Profile** for your Writing text. These metrics have been identified in our research as statistically significant in distinguishing between different Writing levels. If more metrics are used the score is likely to be more reliable. ?

Statistics

OPEN ALL

AVERAGE SYLLABLES PER WORD

1.46

C1



Enter text

Copy and paste, or type text into the box below. Then click **ANALYSE**. You can also analyse multiple documents by separating them with '#' or any other delimiter token. If you want to do this, tick **split** and choose the delimiter in the options below.

Paste or type text...

ANALYSIS OPTIONS

Mode of text: Writing



Document 1

Document 2

Document 3

Document 4

Document 5

HOW DID YOU SCORE?



Subscribers can get a complete *Lexical Profile Score* on the **Scorecard** page. [Click here](#) or use the side menu. Your text must be longer than 100 words.

EXPORT 

textinspector.com

TOOLS ✂

Statistics

Lexical Diversity

Tagger

Errors

Lexis: EVP

Lexis: BNC

Lexis: COCA

Lexis: AWL

Metadiscourse

SCORECARD

EXPORT 📄

HOW DID YOU SCORE?



Subscribers can get a complete *Lexical Profile Score* on the *Scorecard* page. [Click here](#) or use the side menu. Your text must be longer than 100 words.

This tool analyses the basic **Statistics** of your text.

Summary ⓘ

UPDATE SCORES

Sentence count	6 (Amend)
Token count (excluding numbers)	100 (Amend)
Type count (unique tokens, excluding numbers)	69 (Amend)
Average sentence length	16.67 words
Type/token ratio	0.69
Number count	0 / 0 total digits
Syllable count	146 (Amend)
Words with more than 2 syllables	10
Words with more than 2 syllables - Percentage	10.00
Average syllables per sentence	24.33
Average syllables per word	1.46
Syllables per 100 words	146.00

Input Sentences

1. Try the tool out with this paragraph of text here, by pressing Analyse below.
2. Or you can replace this whole text with some text of your choosing.
3. Simply paste any text into this box, or else type it in yourself!
4. Text Inspector gives different scores for Writing texts (student writing) and Reading and Listening texts (e.g. texts designed for classroom reading or listening).
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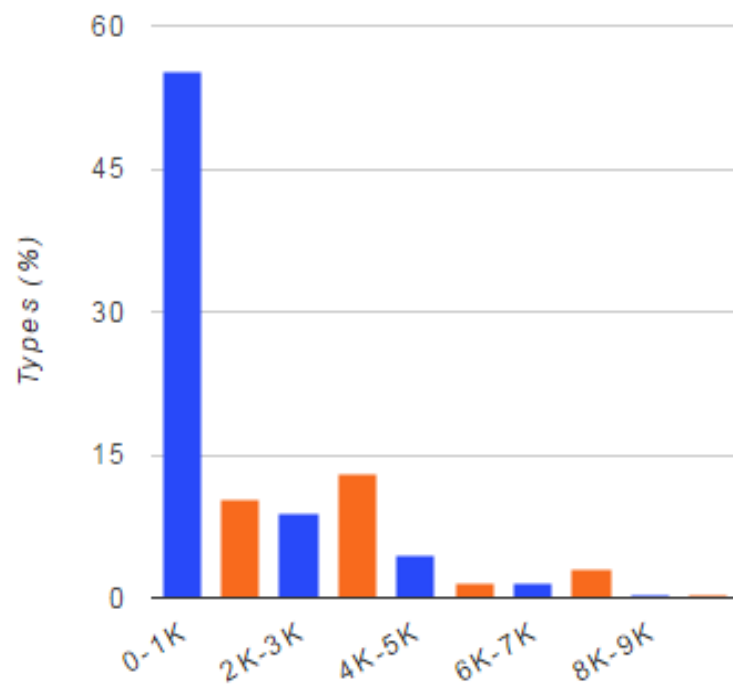
Summary ?

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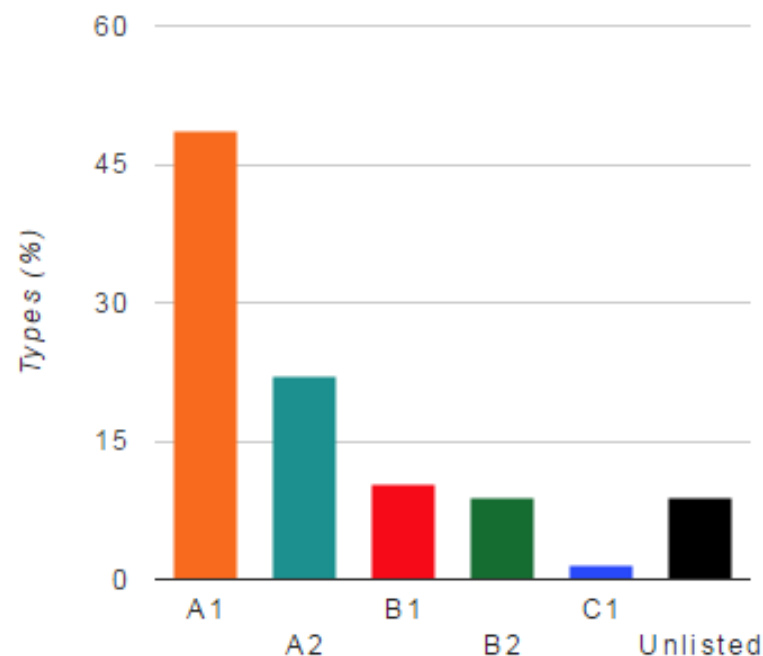
Lexis: BNC

Lexis: COCA



Summary

Word List	Types	Tokens
A1	33 (48.53%)	56 (57.14%)
A2	15 (22.06%)	22 (22.45%)
B1	7 (10.29%)	7 (7.14%)
B2	6 (8.82%)	6 (6.12%)
C1	1 (1.47%)	1 (1.02%)
Unlisted	6 (8.82%)	6 (6.12%)



Statistics and details

[EXPORT STATISTICS AND DETAILS](#)[\(Toggle all words\)](#)**A1**

14 types / 15 tokens

50.00% / 48.39%

[\(Show words\)](#)**A2**

6 types / 8 tokens

21.43% / 25.81%

[\(Hide words\)](#)

by (1)

detail (1)

information (1)

out (1)

text (3)

try (1)

B1

3 types / 3 tokens

10.71% / 9.68%

[\(Hide words\)](#)

accurate (1)

paragraph (1)

pressing (1)

B2

4 types / 4 tokens

14.29% / 12.90%

[\(Show words\)](#)**C1**

1 types / 1 tokens

3.57% / 3.23%

[\(Show words\)](#)

Input

try A2 text A2 inspector B2 out A2 with A1 this A1 paragraph B1 of A1 text A2 here A1 by A2 pressing B1
 analyse B2 below A1 choose A1 the A1 mode C1 of A1 your A1 text A2 and A1 get A1 accurate B1
 calculations B2 look at B2 information A2 on A1 each A1 word A1 in A1 detail A2

Lexis: AWL

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TOOLS

Statistics

Lexical Diversity

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Lexis: COCA

Lexis: AWL

Metadiscourse

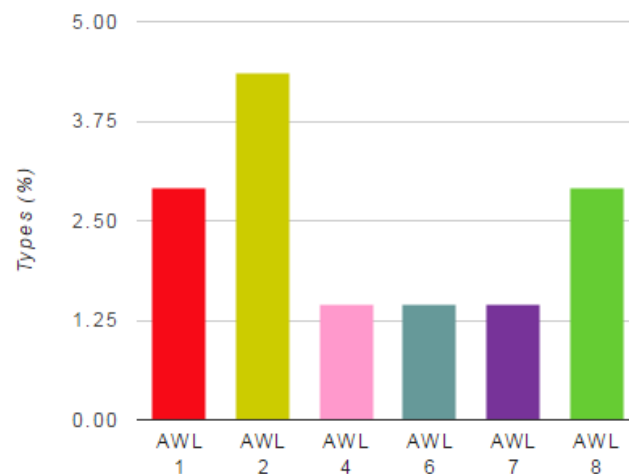
SCORECARD

EXPORT 

This tool analyses your text according to the **Academic Word List** or **AWL** (Coxhead, 2000). Click [here](#) for an explanation. It also analyses your text in terms of key **Phrases** identified by Martinez and Schmitt (Martinez and Schmitt, 2012), identified as K1, K2 and so on, as discussed [here](#). If you want to correct any analysis, go to *Input* below, change the tag, then click *Update*.

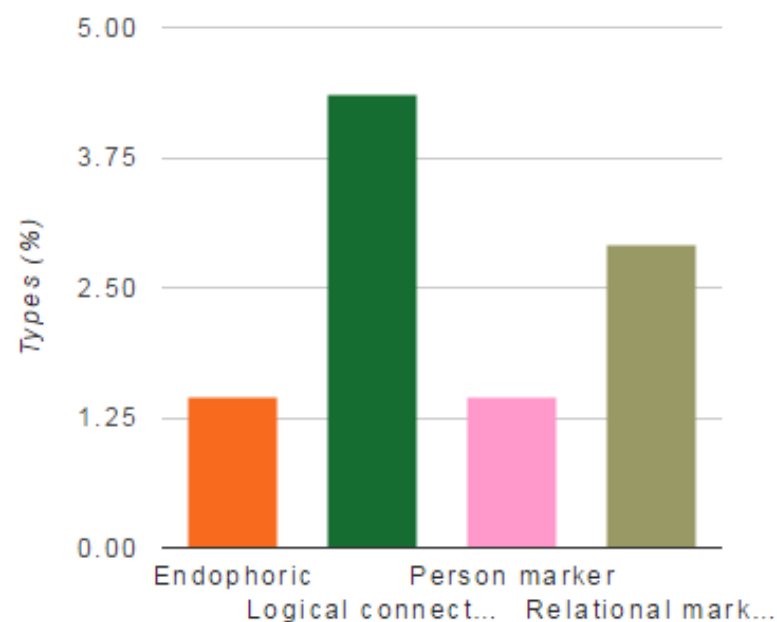
Summary

Word List	Types	Tokens
AWL Total	10 (14.49%)	17 (17.00%)
AWL 1	2 (2.90%)	2 (2.00%)
AWL 2	3 (4.35%)	10 (10.00%)
AWL 4	1 (1.45%)	1 (1.00%)
AWL 6	1 (1.45%)	1 (1.00%)
AWL 7	1 (1.45%)	1 (1.00%)
AWL 8	2 (2.90%)	2 (2.00%)
Unlisted	59 (85.51%)	83 (83.00%)



Summary

Word List	Types	Tokens
Total	7 (10.14%)	14 (14.00%)
Endophoric	1 (1.45%)	1 (1.00%)
Logical connective	3 (4.35%)	9 (9.00%)
Person marker	1 (1.45%)	1 (1.00%)
Relational marker	2 (2.90%)	3 (3.00%)
Unlisted	62 (89.86%)	86 (86.00%)



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TOOLS ✂

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SCORECARD

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For the meaning of A1-C2 please see [here](#).

PERCENTAGE

NUMBER OF
METRICS USED

CEFR LEVEL

63%

28

C1+

Scorecard

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Statistics

OPEN ALL

AVERAGE SYLLABLES PER WORD

1.46

C1





How can you use it?

- # Checking student writing (e.g. to help with mass testing)
- # Checking texts for classroom use
- # Researching texts

Summary: Text Inspector is

- # Based on meticulous research
- # Easily accessible
- # As detailed as you want it to be
- # Very straightforward to use

Summary: the value of automated tools

- A. We need to analyse texts at multiple language-discourse levels: words, syntax, discourse, genre etcetera
- B. Automated tools provide a speedy and efficient way to compare texts on some of these levels, to
 - improve reliability over human judgement/checklists
 - to complement expert judgement (connoisseurship)

But...

- # Text Inspector is not a complete, automated marking system
- # Text Inspector cannot measure everything (e.g. relevance)
- # The teacher still needs to use judgement
- # So we should see it as a valuable tool, not a panacea

Thank you

textinspector.com

Stephen Bax

stephen.bax@open.ac.uk

Some reading

- Bax, S. (in preparation) '*Criteria features in L2 Lexis: Towards a Level Lexical Profile of Learner English*'
- Coxhead, A. (2000) A new academic word list. *TESOL Quarterly* 34 (2), 213-38.
- Graesser, A.C., McNamara, D.S. & Kulikowich, J.M. (2011) Coh-Metrix: Providing multilevel analyses of text characteristics. *Educational Researcher* 40 (5) , 223-234.
- Green, A., Unaldi, A. & Weir, C.J. (2010) Empiricism versus connoisseurship: establishing the appropriacy of texts for testing reading for academic purposes. *Language Testing* 27 (3), 1-21.
- Taylor, L & C. Weir (2012) Automated approaches to establishing context validity in reading tests, Paper given at the 9th EALTA Conference, Innsbruck, Austria –31 May to 3 June 2012
- Weir, C.J., Green, A., Chan, S., Taylor, L., Field, J., Nakatsuhara, F. & Bax, S. (2012) Textual features of CAE reading texts compared with IELTS reading and essential undergraduate texts. Interim report prepared for Cambridge ESOL Examinations.

D levels

Although a departure from the CEFR itself, this is consistent with previous discussions of the CEFR and how it relates to higher levels of proficiency, which are summed up well in this remark from Nick Saville:

“Take, for example, the top level – C2. This is not described with reference to the competence of a well-educated native speaker (however that may be defined), but is conceived of as the highest level that learners might aspire to reach within the normal educational processes available to them in learning another language. Language specialists such as interpreters, professional writers and so on may develop skills which exceed the C2 level thus allowing for a possible D level.”

(Saville, 2012:20, emphasis added)